Math | Human Clock | K-2, 3-5

Standard:

Kindergarten	M.1.2	To read and tell time.
1st Grade	M.1.1	To read and tell time.
2nd Grade	M.1.1	To read and tell time.
3rd Grade	M.1.1	To read and tell time.

Purpose:

- The students will understand time.

Materials needed:

- None

Instructions:

- Have twelve students join hands and form a circle.
- Teacher assigns each student a number beginning with the hour one (1).
- The student repeats his/her number as the teacher walks around the inside of the circle in a clockwise direction as the hands of a clock move.
- Have students practice saying their number in order, (1-12), one by one.
- Have a thirteenth student stand in the very center of the circle and point to a specific hour that the teacher calls out.
- Continue and progress to hour and minute.

Adaptations:

- None

References:

- Body-Mind Mini Lessons

Beanbag Multiplication

Standard:

3rd Grade 3.A.4.2 Multiplication.

Purpose:

- The students will be able to use number patterns and relationships to learn basic facts.

Materials needed:

- Chalk
- Beanbags

Instructions:

- Draw a large chalk grid on the blacktop or sidewalk.
- Mark the numbers (1-5) along the top and down the left side.
- Provide beanbags, and invite children to step up and toss their bags at the grid.
- Wherever the bag lands, that's the equation they must solve.
- For example, if the bag lands on the axis point between (2) and (5), the child must multiply 2 x 5 and call out the solution.
- Challenge more advanced learners with a grid that goes all the way to (10).

Adaptations:

- You may use this activity with addition for younger children.

References:

- None

Standard:

5th Grade 5.G.1.2 To identify acute, obtuse, and right angles.

Purpose:

- The students will use their bodies to make acute, obtuse, and right angles.

Materials needed:

- None

Instructions:

- Ask students to make an acute angle using their arms.
- Make an obtuse angle using your legs.
- Make a right angle using your fingers.
- Make an acute angle using one arm and one leg.
- Repeat process as needed.

Adaptations:

- To music…have the kids make angles with their arms while jogging or bouncing in place to the beat of the music. Call out an angle every eighth count
  Ex: "Right…….acute…….obtuse……acute…….right…….obtuse"

References:

- None

Standard:

4th Grade 4.G.2.2 Students are able to identify a slide of a given figure.
5th Grade 5.G.2.2 Students are able to identify a slide of a given figure.

Purpose:

- The students will identify flips, slides, and turns.

Materials needed:

- None

Instructions:

- Pair up the students.
- Students will use their bodies to model a flip, turn, or slide.
- The partner will identify what is being demonstrated.

Adaptations:

- None

References:

- None

Standard:

3rd Grade 3.N.1.2 Find multiple of whole numbers through 12.
4th Grade 4.N.1.2 Find multiple of whole numbers through 12.

Purpose:

- The students will find multiples of whole numbers.

Materials needed:

- Jump ropes

Instructions:

- The teacher will say a number.
- The students will jump nine times shouting the first nine multiples of the given number.

Adaptations:

- None

References:

- None

Standard:

3rd Grade 3.N.1.2 Students are able to find multiples of whole numbers two-ten (2-10).

Purpose:

- The students will review the basic multiplication facts.

Materials needed:

- Two basketballs
  Outdoor basketball court
  Or
- Two nerf balls
  Trash cans

Instructions:

- Divide students into two teams.
- Have the teams line up side by side behind the foul line facing the basket.
- Give the first player on each team a basketball.
- Tell students that the first game will include the 2's multiplication table. Call out "2 x 4" or any digit.
- At that signal, the first two players shoot and try to score a basket.
- The first player to make a basket answers the math fact 2 x 4. If he/she gets it correct the team earns points equal to that product eight (8). If the team is incorrect, the opponent has a chance to answer and earn points. If both players are incorrect, no points are scored.
- Each player gives the ball to the next teammate and goes to the end of the line. Continue to play until every student has had a chance to shoot. After calling out all of the facts for the 2's table, begin another multiplication table.

Adaptations:

- You may use with any addition, subtraction or multiplication facts.

References:

- None

Math BUZZ 3-5

Standard:

3rd Grade 3.N.1.2 Find multiples of whole numbers 2-12.
4th Grade 4.N.1.2 Find multiples of whole numbers 2-12.

Purpose:

- The students will find multiples of whole numbers

Materials needed:

- None

Instructions:

- All students stand up in a circle.
- The students will begin counting.
- If the player makes a mistake he must sit down.
- Last person standing wins.
- Continue using different numbers.
- They will substitute the word "buzz" and "buzz" around the room.
- They will continue counting and buzz around when they come to multiples of seven. (Ex: "1, 2, 3, 4, 5, 6, buzz, 8, 9, 10, 11, 12, 13 buzz")

Adaptations:

- None

References:

- www.gameskidsplay.net

Math How is My Figure? 3-5

Standard:

3rd Grade	3.G.1.1 Recognize geometric shapes.
4th Grade	4.G.1.1 Recognize geometric shapes.
5th Grade	5.G.1.1 Recognize geometric shapes.

Purpose:

- The students will show understanding of plane and solid figures.

Materials needed:

- Sidewalk chalk
- An outside area to draw on
- Jars labeled with "Plane Figures" and "Solid Figures"
- Cards labeled with plane and solid figures

Instructions:

- Pair students.
- Pairs will spread out on the sidewalk.
- Students will take turns selecting a card and drawing the figure.
- The partner will identify the plane or solid figure.
- When correct, the partner will skip to the corresponding jar and put the card in it.
- Activity will continue for a set period of time.

Adaptations:

- None

References:

- None

Math Macarena Multiples 3-5

Standard:

3rd Grade 3.N.1.2 Students are able to find multiples of whole numbers two through ten (2-10).

Purpose:

- The students will reinforce multiples.

Materials needed:

- Music - "Macarena"
- Stereo

Instructions:

- Mini-lesson on the "Macarena" (see below).
- Teacher says multiples of two.
- With each dance movement a multiple is said.
- Example: 2, 4, 6, 8, etc.
- Repeat with other multiples.
- Directions to "Macarena":
  Right palm up
  Left palm up
  Right palm down
  Left palm down
  Right palm on left shoulder
  Left palm on right shoulder
  Right palm on back of the right side of your head
  Left palm on back of the left side of your head
  Right palm on left hip
  Left palm on right hip
  (Clap)"Let's try three's," (Turn)

Adaptations:

- You may choose to incorporate counting or letters.

References:

- None

Standard:

3rd Grade	3.N.1.3 Fractions
4th Grade	4.N.1.3 Fractions
5th Grade	5.N.1.3 Fractions

Purpose:

- The students will name fractions from visual representations.

Materials needed:

- Football Field
- Cones (if available)

Instructions:

- Line the students up on the end line.
- Discuss how the football field is divided into ten equal parts.
- Model parts of the whole by standing on the different yard lines.
- Students will run to the yard lines of the fractions given.

Adaptations:

- This can used to demonstrate addition and subtraction of like fractions.
- This can used to compare fractions.

References:

- None

Jumping Jacks for Basic Facts

Standard:

3rd Grade A.4.2 Number patterns and relationships to learn basic facts.

Purpose:

- The students will use number patterns.

Materials needed:

- None

Instructions:

- Teacher decides which facts will be addressed during the lesson (Ex. multiples of nine).
- Students will do jumping jacks as they recite the multiples of the given number "9, 18, 27, 36", etc.

Adaptations:

- This can be used with addition, subtraction, and division.

References:

- None

Standard:

3rd Grade 3.G.1.1 Students are able to recognize and compare the following plane and solid geometric figures: square, rectangle, triangle, cube, sphere, and cylinder.

4th Grade 4.G.1.1 Students are able to identify the following plane and solid figures: pentagon, hexagon, octagon, pyramid, rectangular prism, and cones.

5th Grade 5.G.1.1 Students are able to describe and identify: squares, rectangles, isosceles and equilateral triangles, pyramids, rectangular prisms, and cones.

Purpose:

- The students will understand geometric shapes.

Materials needed:

- None

Instructions:

- Students lie on floor, stretched out, head to foot, to make the shapes:
  Three (3) students form a triangle.
  Four (4) students form a square.
  Five (5) students form a pentagon.
  Four (4) students arrange themselves into a parallelogram.
  Ten (10) students could form an open-space, 5-pointed star.

Adaptations:

- None

References:

- Body-Mind Mini Lessons

Standard:

3rd Grade	3.N.1.1 Comparing numbers.
4th Grade	4.N.1.1 Comparing numbers.
5th Grade	5.N.1.1 Comparing numbers.

Purpose:

- The students will compare using less than (<), greater than (>), and equal to (=).

Materials needed:

- None

Instructions:

- Teacher will write two (2) numbers on a white board.
- Students will use their legs to show less than, greater than, and equal to.
- Greater than will be represented by lying on the ground and spreading their legs out to a 45 degree angle.
- Less than will be represented by lying on the ground and criss-crossing their legs.
- Equal to will be represented by lying on the ground and bringing their legs together.

Adaptations:

- None

References:

- None

Standard:

3rd Grade 3.N.1.1 (0-10,000) Use the structural characteristics of a set of numbers.

4th Grade 4.N.1.1 (.01-1,000,000) Use the structural characteristics of a set of numbers.

5th Grade 5.N.1.1 (.001-1,000,000,000) Use the structural characteristics of a set of numbers.

Purpose:

- The students will read and compare numbers.

Materials needed:

- A set of numbers on construction paper (0-9)
  (Laminated is a good idea; May need a second set for larger place values)

Instructions:

- Hand out number or symbol cards to students.
- Say a number aloud to the class, "217 4/10".
- Students with the cards of those specific numbers quickly and quietly go to the front of the room and create that number by lining up in the correct order.
- Teacher calls on a student from the audience to read the number.
- Teacher asks the number in the tenths place to step forward.
- Repeat process as much as you desire.

Adaptations:

- Call two numbers at once and then compare which one is greater than the other.
  Prepare a set on number cards for a specific event or holiday.
  (Homecoming, Christmas, spring, Martin Luther King Jr. Day, etc.). Write the number on the front and a letter on the back. When the students form the number they will then flip their cards over to make a word, self- correcting the number.
  KIDS LOVE THIS!

References:

- None

Standard:

3rd Grade	3.M.1.3 Identify US units of length, weight, and capacity.
3rd Grade	3.M.1.4 Select appropriate units to measure length, weight, and capacity.

Purpose:

- The students will measure water in pints, cups and/or ounces.

Materials needed:

- Sponge and 2 buckets (for each group)
- Timer
- Masking tape

Instructions:

- The teacher will divide the class into groups of three to five.
- The teacher and students will make a starting line and measure 50 feet for the end line (mark with masking tape).
- The students will dip their sponge into the bucket of water at the start line and run to the finish line and squeeze out the water to fill their team's bucket.
- The relay will continue thru all of the team members.
- The students will measure the water in the buckets.
- The team with the most water in the end bucket will win.

Adaptations:

- None

References:

- www.education-world.com

Standard:

3rd Grade 3.A.4.1 Students are able to extend linear patterns.

4th Grade 4.A.4.1 Students are able to solve problems involving pattern identification and completion of patterns.

Purpose:

- The students will understand sequencing.

Materials needed:

- None

Instructions:

- Students stand in a group in the center of room facing teacher at front of room.
- Students remain facing forward throughout exercise.
- Teacher counts numbers out loud and uses clapping.
- One count per walking step.
- On the board have the following written:
  A - four walks forward, four walks backward
  B - four skips forward; then turning to face the back of the room and skipping four times toward the back of the room
- First students practice A and B separately.
- Then the A-B-A sequence.
- The teacher can also call out either A or B and the students do the walking pattern.
- Students memorize the order from following the teacher's oral direction.
- Repeat a new sequence as often as necessary.
- Do sequencing patterns: A-B-A-B, A-A-B-B, A-A-B-B-A-A.

Adaptations:

- None

References:

- Body-Mind Mini Lessons